



Navy Environmental Health Center (NEHC)  
Directorate of Population Health  
Sexual Health and Responsibility Program (SHARP)  
620 John Paul Jones Circle, Suite 1100  
Portsmouth VA 23708-2103  
voice: (757) 953-0974 [DSN 377]  
fax: (757)953-0688  
[sharp@nehc.med.navy.mil](mailto:sharp@nehc.med.navy.mil)  
<http://www-nehc.med.navy.mil/hp/sharp>



## Unplanned Pregnancy Among Sailors: Background and Opportunities

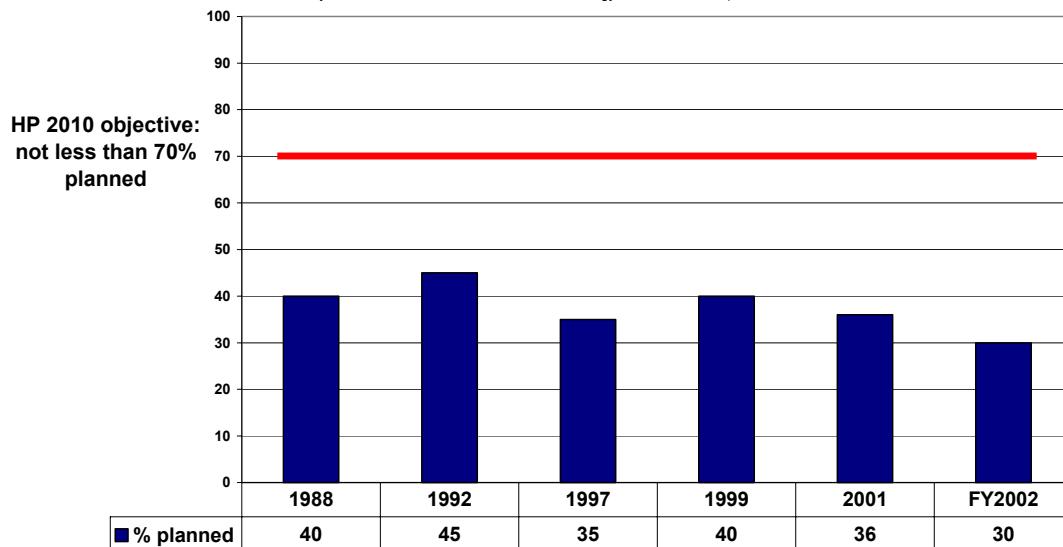
5 January 2005

Unplanned pregnancies among active duty Sailors continue to be of concern. In 2001, 10% of young (E-2 through E-4) female Sailors became pregnant<sup>1</sup>. Of all pregnancies among surveyed enlisted female Sailors during that year, only 1 of 3 (36%) was planned. In FY2002, this rate fell to 30%<sup>2</sup>. The national *Healthy People 2010* objective is to increase the proportion of pregnancies that are intended to 70%<sup>3</sup>. Planned pregnancy rates among surveyed active duty Navy enlisted women in 1988, 1992, 1997, 1999, 2001 and 2003 are shown in Figure 1.

Figure 1

### Percent of Pregnancies Among Navy Enlisted Women Which Were Planned

(sources: Navy Pregnancy and Parenting Surveys: Navy Personnel Research and Development Center 1996, 1998; and Navy Personnel Research, Studies, and Technology 2001, 2002, 2004)



## Report Documentation Page

*Form Approved  
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>05 JAN 2008</b>	2. REPORT TYPE	3. DATES COVERED <b>00-00-2008 to 00-00-2008</b>		
4. TITLE AND SUBTITLE <b>Unplanned Pregnancy Among Sailors: Background and Opportunities</b>			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Navy Health Center, Portsmouth, VA</b>			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>8</b>
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>		
19a. NAME OF RESPONSIBLE PERSON				

Navy women who become pregnant often report the father to be another military member. For the most recent pregnancy experienced by those ever pregnant while in the Navy, 73% of enlisted members surveyed in 2001 said the father was a military man, and about half of the enlisted female Sailors that experienced an unplanned pregnancy were unmarried (49%). About half of the enlisted female Sailors that experienced an unplanned pregnancy were married during their most recent pregnancy (49 percent). The vast majority (81%) of men who fathered the children of unmarried Sailors in 1999 were military men<sup>4</sup>.

A significant proportion of those children are born to single parents. Among male enlisted Sailors, one of four single fathers with custody in 2001 was unmarried. Of female parents Navy-wide, 24% were single in 2001. Of male Navy parents in 2001, 6% were single. Fully 7% of all Navy women in 2001 were single parents, as were 3% of all Navy men<sup>1</sup>. In 2003, there were over 5000 single Navy mothers and over 10,000 single Navy fathers<sup>2</sup> which may impact deployment readiness.

### Impact.

Pregnancy and parenthood are compatible with a military career. The authors are aware of no study that demonstrates a negative impact of pregnancy, per se, on the readiness of the Navy. However, based on the challenges of single parenthood and its effect on Americans in general<sup>5</sup>, it is safe to state in general terms that an unplanned pregnancy may adversely impact the pregnant Sailor, the father, the child, and - thereby - the Navy.

Among the general population, the Institutes of Medicine found the most obvious adverse consequence of unintended pregnancy is that roughly half end in abortion. Other social consequences associated with unplanned pregnancy in the general U.S. population (though difficult to separate from the effects of income, education, and maternal health) may include low birth weight babies, developmental problems among unwanted children, and child abuse or child neglect<sup>5</sup>.

Clearly, the Sailor experiencing an unplanned pregnancy is suddenly confronted with important decisions that may entail significant changes to his or her life plans. The stresses of single parenthood are physical, emotional and financial. Single parents, both male and female, are uniquely challenged by the competing requirements of parenthood and work. Deployment childcare is also a challenge for young single parents. In 2001, 73% of female enlisted single parents said they plan to move their children when they deploy<sup>1</sup>. While deployments and family separations are always stressful, this uprooting may make deployments especially difficult for the single parent and his or her children. Military men who father children out of wedlock may be confronted with significant legal, emotional, and financial challenges, even if they do not raise the child. These stresses may negatively impact the Sailor and his duty performance.

There is a perception among some military leaders that pregnancy among Sailors is “problematic”<sup>4</sup>. New mothers may be voluntarily discharged from the Navy – resulting in the loss of trained Sailors. Certainly, all pregnancies entail Navy health care expenditures. The Department of Health and Human Services has estimated the pregnancy care cost for

one woman who does not intend to be pregnant, yet is sexually active and uses no contraception, to be about “\$3,200 annually in a managed care setting”<sup>3</sup>. Costs also include reduced duty hours during pregnancy, and absence from the workplace during delivery and convalescence. In the case of unplanned pregnancies, these costs may be avoidable. Additionally, the Navy leadership has appropriately required evaluation of the workplace of pregnant Sailors. This may lead to temporary reassignments to other duties if the workplace is considered hazardous to the Sailor or her fetus. Hence, the Sailor loses on-the-job experience, while the Navy temporarily loses the service of a skilled Sailor. Navy policy also reassigns Sailors off ships before the end of the 20<sup>th</sup> week of gestation. Of those enlisted members surveyed in 2001, most (58 percent) reported being transferred earlier than the 20th week, during their last pregnancy<sup>1</sup>. These scenarios may leave a command under-staffed until a replacement arrives. In FY03, 12% of enlisted females on “sea duty” became pregnant (as did 14% on “shore duty”)<sup>2</sup>. Work centers may also be affected by single parent workers due to the need to accommodate family emergencies and unforeseen childcare situations.

#### Attitudes about birth control.

In 2002, about 3 of 4 Sailors “usually” used some form of birth control (71% of men, 75% of women). However, 31% of surveyed male enlisted Sailors and 15% of female Sailors said “when a birth control method is not available, I believe you just have to take a chance and hope a pregnancy does not occur”. Interestingly, among enlisted Sailors who became pregnant in 2003, 50% were not using birth control<sup>2</sup>. Of those enlisted members who were using birth control but became pregnant in 1999, oral contraceptives were most commonly reported to have been used (59%)<sup>4</sup>.

In 1997, Sailors who had an unplanned pregnancy but were not using any form of contraception were asked why they did not use birth control. Their answers included “because withdrawal or the rhythm method works well enough” (29%), and “I am not sexually active” (24%)<sup>6</sup>.

Data from the *2002 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel* indicate that only half (49%) of unmarried male Sailors and only one third (36%) of unmarried female Sailors said a condom was used at last sexual intercourse<sup>7</sup>. The national *Healthy People 2010* objective is not less than 50%<sup>3</sup>.

#### Education.

Furthermore, over 95% of surveyed enlisted Sailors in 2001 stated they had received “training about birth control” during their Navy career<sup>1</sup>. Responsible sexual behavior in general and birth control and parenting in particular are typically included in “all-hands” lectures presented at the Recruit Training Center in Great Lakes and are provided to commands Navy-wide as part of General Military Training (GMT). However, in 2003, only 3% of enlisted women Sailors and only 4% of enlisted men say they have seen the comprehensive film regarding unplanned pregnancy developed by the Navy entitled *Responsible Parenting – Give Yourself a Chance*<sup>2</sup>. “Choices”<sup>8</sup>, a multi-day training

program that includes the requirement for Sailors to care for an infant simulator, developed at Naval Station Sigonella, has shown some evidence of effectiveness and has been tried at other Navy locations.

Knowledge of birth control among Sailors is high and attitudes are generally positive, but there are some misconceptions. For example, in 2003, only 71% of enlisted women and 39% of enlisted men were aware of emergency contraception, and only 23% of enlisted women and 10% of enlisted men believed emergency contraception was available where they were stationed<sup>2</sup>.

In 2001, well over half of enlisted men (63%) and enlisted women (55%) agreed with the false statement “condoms are as effective as the pill in preventing pregnancy”<sup>2</sup>. These Sailors were not aware that “typical use” of condoms has a pregnancy prevention failure rate of 14%, while the pill has a “typical use” failure rate of only 5%<sup>9</sup>. Another misconception involves birth control pills. Most enlisted men (66%) did not agree with the statement “if a woman misses 2 or more pills in a row, she must use an additional method of birth control along with the pill for the remainder of the month to be safe”<sup>1</sup>. These Sailors were unaware that an alternative birth control is recommended when consecutive pills have been missed<sup>9</sup>. Still another misconception regards weight gain. In 2001, almost 1 of 3 enlisted women (30%) believed that “almost all women who take the birth control pill gain weight”<sup>1</sup>. These Sailors may have been unaware that weight changes occur in only a small proportion of women who start oral contraceptives, and the changes are minimal<sup>9</sup>.

These data suggest the following “all hands” education messages (worded to suit target audiences) may be beneficial:

### **Suggested “All-Hands” Education Messages**

- When a birth control method is not available, it is very risky to “take a chance and hope a pregnancy does not occur”.
- Women who do not use any form of contraception because they are “not sexually active” should (a) think about and plan how they will maintain their plan of abstinence in the presence of pressure to have sex, (b) if circumstances change and she decides to have sex, plan for and insist on the correct and consistent use of a latex condom, (c) consider discussing birth control with her health care provider before having sex, and (d) consider promptly discussing emergency contraception with her health care provider if her abstinence plan failed and she had sex without any form of birth control.
- Concerns of weight gain need not inhibit a woman from using oral contraception. Some women gain weight and some lose weight when taking birth control. A woman’s health care provider may adjust birth control prescriptions in response to weight gain concerns.
- A woman who is on the pill is less protected from pregnancy if she misses 2 pills during the month.
- Emergency contraception pills (ECP) can reduce the chance of pregnancy by 75% if taken within 72 hours of the event; and ECP are available at every Navy clinic and hospital. Women who are concerned about the effectiveness of their current birth control method to prevent pregnancy due to a recent (within 72 hours) sexual encounter should promptly see a doctor.
- Condoms are not as effective as birth control (BC) pills in preventing pregnancy.
- BC pills and other chemical contraceptives do not prevent the transmission of HIV and other sexually transmitted infections. The correct and consistent use of latex condoms significantly reduces the risk of HIV transmission and reduces the risk of acquiring or transmitting other STIs. For people who choose to have sex, but seek to avoid pregnancy and infection, chemical contraceptives and condoms, used together, significantly reduce risk.

## Health Care

Access to contraceptives, including emergency contraception pills, for Sailors is free and generally convenient. However, in 2001, about 1 of 3 surveyed Sailors (male and female) said they would be uncomfortable discussing contraception with their onboard medical personnel<sup>1</sup>.

Navy policy directs health care providers to discuss contraception, including emergency contraception, during each annual women's health exam<sup>10</sup>. This requirement is further supported by the Navy's Preventive Health Assessment (PHA) counseling guidelines<sup>11</sup>. However, in 1999, 1 of 3 (34%) female Sailors said their health care provider did not discuss contraception during their last physical exam (within the past year). Less than half (42%) said their health care provider discussed sexually transmitted diseases, and only 1 of 10 (10%) say they discussed emergency contraception<sup>4</sup>. And, as previously stated, knowledge levels among Sailors about emergency contraception appears low.

These data suggest that information messages on the following topics be developed for Navy medical professionals:

### **Suggested Topics: Information Messages for Navy Medical Professionals**

- effectiveness, appropriate use, and availability of emergency contraception.
- requirement for, and potential benefit of, discussing contraception and emergency contraception with female Sailors annually.
- requirement for, and potential benefit of, assessing sexual risk behavior with all active duty members in conjunction with the annual preventive health assessment.
- free, on-line, ready-to-use materials are available to Navy health care professionals for use in patient education and "all-hands" lectures (such as the Navy Environmental Health Center's Sexual Health and Responsibility Program (SHARP) at <http://www-nehc.med.navy.mil/hp/sharp/pregnancy.htm> )
- education outreach by Navy medical professionals to their local non-medical commands (i.e. assisting with sexual health GMT) may be beneficial and welcomed.
- some patients say they are not comfortable speaking with on-board medical personnel about contraception; therefore, ship and shore medical activities should thoughtfully consider the implications and appropriate response to this circumstance.

## Summary

Unintended pregnancies among active duty Sailors occur in significant numbers and at rates that fall short the national objective. The consequences of unintended pregnancy, including single parenthood, may negatively affect Sailors, their children, and the Navy. Some unintended pregnancies may be avoidable. The Navy parenting and pregnancy surveys provide clues to misconceptions held by some Sailors. These clues, if used to craft educational messages for Sailors and Navy medical professionals, and if used in “all-hands” training and patient education, may help reduce the incidence of unplanned pregnancy among the active duty force.

## Sources

1. Uriell, Z. (2001). Pregnancy and Parenthood: Results of the 2001 Survey. Navy Personnel Command, Millington TN, (unpublished, PowerPoint briefing, 5 Oct 2001)
2. Uriell, Z. (2004). Results of the 2003 Pregnancy and Parenthood Survey. Navy Personnel Research, Studies, & Technology, Millington TN, (unpublished PowerPoint briefing, 5 April 2004 and e-mail communication with the author, 2 November 2004)
3. U.S. Department of Health and Human Services (2002). *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. <http://www.healthypeople.gov/>
4. Thomas P., Mottern J. (2002). Results of the 1999 Survey of Pregnancy and Single Parenthood in the Navy (NPRST-TN-03-02). Navy Personnel Command, Millington TN
5. Institutes of Medicine (1995). The best intentions. Unintended pregnancy and the well being of children and families. National Academy Press, Wash DC
6. Thomas P., Uriell Z. (1998). Pregnancy and Single Parenthood in the Navy: Results of a 1997 Survey (TR-98-6). Navy Personnel Research and Development Center, San Diego, CA
7. Bray, Robert M, (2004). 2002 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel. Prepared for the Assistant Secretary of Defense (Health Affairs) under Cooperative Agreement No. DAMD17-00-2-0057 by RTI International, Research Triangle Park, North Carolina
8. Hughes T, Staren-Doby D. (2003). Reducing unintended pregnancy in young, single active duty women in an overseas environment. Military Medicine 168, 1:11 2003
9. Hatcher R, Trussell J, Stewart F, Cates W., Stewart G, Guest F, Kowal D (1998). Contraceptive Technology, 17<sup>th</sup> ed. Ardent Media, New York
10. DoN (2002, Aug 20). NAVMED P-117, Manual of the Medical Department (MANMED), page 15-69. (Note: 19 Oct 2005: *NAVMED P-117 Manual of the Medical Department* change 126, August 2005, changed the chapter on the annual women's health exam to Article 15-112. See <http://www.vnh.org/Admin/MMD/MMDChapter15.pdf>)
11. DoN (2001, Dec 5). OPNAVINST 6120.3, Preventive Health Assessment. <http://www.vnh.org/Admin/MMD/001Contents.html>